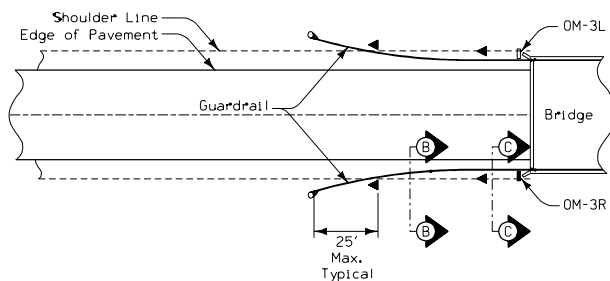


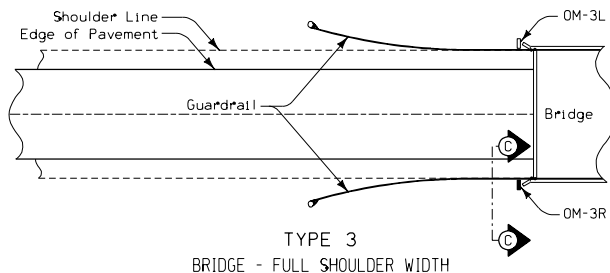
TYPE 1

BRIDGE - 30 FT. WIDE OR LESS BUT NOT FULL SHOULDER WIDTH



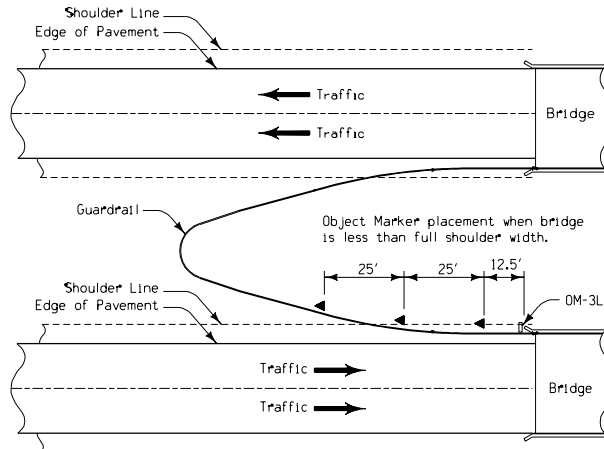
TYPE 2

BRIDGE - WIDER THAN 30 FT. BUT LESS THAN FULL SHOULDER WIDTH



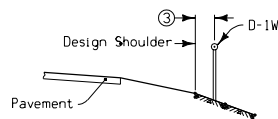
TYPE 3

BRIDGE - FULL SHOULDER WIDTH

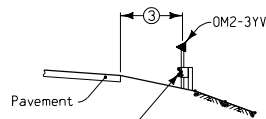


TYPE 4

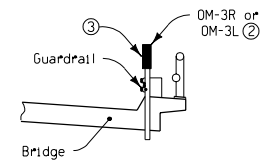
BRIDGE - BULLNOSE GUARDRAIL INSTALLATION



SECTION A-A



SECTION B-B



SECTION C-C

LEGEND ③	
□	Type 3 Object Marker, Left (OM-3L)
■	Type 3 Object Marker, Right (OM-3R)
◀	Type 2 Object Marker (OM2-3YV)
○	Single White Delineator, (D-1W)

- ① Not required on projects where delineators are proposed or installed throughout the length of the project.
- ② All Delineator and Object Marker placement shall be behind face of guardrail. The edge of object marker (OM-3L or OM-3R) shall be aligned with the face of guardrail.
- ③ Refer to Standard Road Plans RE-7 and RE-47.
- ④ At ramp terminals only, install Single White Delineators as follows: Place first delineator at location where near ramp terminal radius meets the edge of the through pavement. Place additional delineator(s) spaced equally (spacing not to exceed 200') between first delineator and guardrail.

#### GENERAL NOTES:

Details shown hereon cover the placement of Markers and Delineators at bridges in conjunction with the installation of guardrail. If a guardrail installation is warranted, delineation is required as determined by the following types of situations.


- TYPE 1:** For bridges that are 30 ft. wide or less, but not full shoulder width. Beginning 25 ft. from the approach end of guardrail, install Type 2 Object Markers (OM2-3YV) at 25 ft. intervals behind the guardrail. Install a Type 3 Object Marker (OM-3R and OM-3L) at the bridge ends. On paved roadways only, install 7 Single White Delineators (D-1W) at 200 ft. spacing beginning 200 ft. in front of the approach end of the guardrail. For ramp terminals, see note 4.
- TYPE 2:** For bridges over 30 ft. wide, but less than full shoulder width. Beginning 25 ft. from the approach end of guardrail, install Type 2 Object Markers (OM2-3YV) at 25 ft. intervals behind the guardrail. Install a Type 3 Object Marker (OM-3R and OM-3L) at the bridge ends.
- TYPE 3:** For full shoulders width bridges. Install a Type 3 Object Marker (OM-3R and OM-3L) at the bridge ends.
- TYPE 4:** Bridges with Bullnose Guardrail Installation. Install a Type 3 Object Marker (OM-3L) at the bridge end.  
For full shoulder width bridges:  
No Delineation required.  
For less than full shoulder width bridges:  
Install 3 Type 2 Object Markers (OM2-3YV)  
Install first object marker 12.5' from bridge end post installing remaining two at 25' intervals.

When object markers or delineator are required with guardrail installations, the object markers or delineator will be included in the price bid for installation of guardrail. When object markers or delineators are required when no guardrail work is done the object markers and delineators will be bid.

Price bid for contract items shall be considered full compensation for furnishing, fabricating, and erecting the delineators and object markers including posts, necessary hardware, and labor to complete the work.

Contract bid items are:  
Single White Delineators  
Type 2 Object Markers  
Type 3 Object Markers

Incidental Item:  
Offset Brackets

 <b>Iowa Department of Transportation</b> <b>Highway Division</b>	
<b>STANDARD ROAD PLAN RE-48A</b>	
REVISION: Added paragraph to General Notes, defines what is included in price bid for installation of guardrail.	REVISION NO. 9
Mitchell J. Sullivan 12-05-00	REVISION DATE 04-03-01
APPROVED BY DESIGN METHODS ENGINEER	
<b>DETAILS OF MARKER AND DELINEATOR PLACEMENT (AT BRIDGES)</b>	